

*A1*  
*cont*  
an optical element provided on the substrate, the optical element being connected with the electric connection terminal; and  
one end of a slender light transmitter fixed in the groove and optically coupled with the optical element.

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*Sub B2*  
*A2*  
5. An optical module comprising:  
a substrate having a groove in a surface of the substrate;  
an electric connection terminal provided on the substrate;  
a planer lightwave circuit provided on the substrate, the planer lightwave circuit being connected with the electric connection terminal; and  
an optical fiber partially provided in the groove and optically coupled with the planer lightwave circuit.

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*Sub B3*  
*A3*  
7. A combination comprising:  
a connector connectable with an electric circuit board; and  
an optical module including:  
a substrate having a groove in a surface of the substrate;  
an electric connection terminal provided on the substrate, the electric connection terminal electrically connectable with the connector;  
an optical element provided on the substrate, the optical element being connected with the electric connection terminal; and  
one end of a slender light transmitter fixed in the groove and optically coupled with the optical element.

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